

\*\*\*\*\*  
\* INDIANA SINCLAIR-TIMEX NEWSLETTER \*  
\*\*\*\*\*

March-April 1990

Editor-Frank Davis  
Assist - M. Felerski

This issue....

Next meetings -- May and June  
UPDATE Computer Systems gets new Publisher  
The Sinclair Desktop Publishing Journal by M. Felerski  
TSDPJ Reviews "FIRST EDITION" by Mike Felerski  
From ISTUGs Archives "LET ICONS BE ICONS" Basil Wentworth  
Medicare Income Tax by Herb Bowers, Sr.  
Rotronics Wafadrive Copy Command For Epson by M. Felerski  
S.M.U.G. presents the 1990 Sinclair Computer Expo!

I. S. T. U. G. MEETING

The meeting for May is cancelled due to the meeting and the Indianapolis 500 race being held on the same day. Perhaps the proper way to put it is that we will hold our May meeting at the Sinclair Expo Saturday. Check at the Mechanical Affinity booth to find out what time the meeting will be. It looks like at least 8 to 10 of our members will be there, not counting associate members from out of state.

The meeting for June 30th will be our Club Picnic for all members and their families. In fact we feel so generous that any Sinclair user even not a member, from anywhere, is invited. The picnic will be held at our country place on RR 4, Peru, In. We will have a map in the next issue of the newsletter. For those who can't wait, directions are as follows. From US 31 going North, take the Peru exit on Business 31. Just prior to the bridge, turn left onto a country road and go about 4 miles. The road will turn into a gravel road...about 1/4 mile and you will see a chain link fence on your left. Pull into the drive and you are there. For additional directions call me at 317-473-8031. The meeting starts at 1:30 as usual and the picnic and games will start afterward. Bring your favorite dish.

The July meeting will be held on July 28th, 1:30 PM at the Eagledale Public Library. For those who need directions call Paul Holmgren at 317-291-6002 or Frank Davis at 317-473-8031.

Just a note to people who call from out of state and leave a message on my machine...please leave an address, not just a phone number. I will write, but probably not return a long distance call at my expense.

UPDATE COMPUTER SYSTEMS GETS NEW PUBLISHER

Bill Jones who started and published UPDATE is turning over the magazine after the July issue to Carol and Frank Davis who will be publishing the magazine with the October issue. They will be assisted in this enterprise by Eliad P. Wannum and with the continuing support of people like Bill Cable, Peter Hale, Al Feng, Bob Hartung and others hope to continue UPDATE in at least as grand a style as Bill Jones always gave us. Inquiries and renewals can be sent to UPDATE Computer Sytems, P.O. Box 1095, Peru, IN 46970. This is a separate magazine from SNUG, who will continue to put out their own newsletter, though they will have space available in the mag for their use.

# The Sinclair Desktop Publishing Journal

**Volume 1 Issue 2 Spring 1990**  
**Edited By Mike Fellerski**

## What's This?

Good Grief...He's at it again. As I am sure you have noticed, this is not the same format as last time. Yes, that is true. This issue has been (or is being) created using a new desktop publishing program from Great Britain called Word-Master. So your first reaction is "Oh No, currency exchanging, overseas postal rates and long waits!" This is far from true because there is now a US distributor for Word-Master and it Jack Dohany.

As many of you remember Jack brought the Timex Sinclair community his wonderful Relocatable Aerco Printer driver and several other programs. He is now distributing Word-Master in the States for owners of TS2068s with some form of Spectrum emulator—Don't have an emulator you say, well you can get that from Jack as well.

See Word-Master on page 2

## In This Issue Of TSDPJ

- o Word-Master Preview
- o Pixel Print Professional 5.0 Overview of Features
- o A Look at the Print Factory's First Edition Program
- o Where to Write

## Pixel Print Professional 5.0

This spring marked the return of one of the top names in Timex Sinclair programming and the release of the latest upgrade to a very popular Desktop Publishing program for the TS2068. If you have not guessed by now, I am speaking of Stan Lemke and his latest release of the Pixel Print Professional 5.0.

Pixel Print Professional 5.0 was released in February of this year and combines many of the same features of past Stan Lemke and Steve Spalding Pixel Print versions along with several new features. The Pixel Print Professional 5.0 package includes a fine looking 12 page users manual (which appears to have been produced with PPP) and a cassette tape containing the BASIC program and CODE files.

The foremost feature of PPP 5.0 is that it comes as "Fairware". According to the manual, "That means that you can give copies of this program to anyone and everyone...If you like this program and would like to see more software developed for the TS-2068, then please send \$15 (or what ever you think is FAIR)"

The idea of Fairware is not new to the personal computer world, and the suggested amount is modest in compared with the features of the program.

Pixel Print Professional 5.0 consists of five programs or modules which are all integrated with the Pixel Print Professional "BOOT" program. The BOOT program presents a screen menu in order to help the user choose a desired module. The eight programs to choose from are: Pixel Print Professional, Create a Document, Print a Document, Tasword II, Tasword/MScript to DTP, Pixel Artist, Print-A-Page and Customized Print Driver. There is also a ninth option which displays the fairware message

See PPP 5.0 on page 2

Pixel Print Professional 5.0  
Features the following  
integrated modules:

Pixel Print Plus!  
Tasword/MScript Conversion  
Create a Document  
Pixel Artist  
Print a Document  
Print a Page  
Customize

Pixel Print Professional 5.0  
commands include:

Quit to BASIC  
Enter Artist program  
View both page layouts  
Move up or down 1, 8, 64 pixels  
Set character height  
Move to top or bottom of column  
Set character width  
Keep, Undo, Load and Save  
  
Print a column, greeting card,  
or label  
Change, Load, bold, kerning and  
spacing of fonts  
Clear column or screen and,  
Block functions

## PPP 5.0

As the author points out, Pixel Print Plus! is the heart of the system. With PPP, you mold your text, graphics and fonts into Newsletters, Greeting Cards, Mailing Labels, Index Cards and more.

Pixel PPP, as in previous Pixel Print releases provides block cut, paste and delete, full and partial column saves and loads, along with font and icon loads. The user also has the option of loading and saving SCREENs.

This new Pixel Print Plus! has many special features, some old and some new. These special features include instant icon doubling, greeting card and label printing, disk catalog display, column exchange (when using 32K of expanded memory) and a menu option to enter the Artist module.

The Create a Document module/program lets the user combine several columns into pages of a document. It creates a collection of file names which is a Document Definition File. Create a Document options include Define Next Page which allows the user to define whether the column will contain a header and what two columns will make up the page, Edit a Page, Save the Document Definition and Quit.

Print a Document is used to load a document definition, format the document, select draft or NLQ mode, select the number of copies to be printed and to print the actual document.

The Tasword/MScript to PPP module does just that, it converts Tasword or MScript files to the PPP format. A font can be added before conversion.

Pixel Artist is a desktop publishing based module for creating graphics or SCREENs. There are several features, too many to discuss in this article but will be featured in a future issue of TSDPJ. Finally, there is Print a Page and Customize. Print a Page is self explanatory and Customize is used to adjust the print driver to match PPP to the users printer and I/F.

The information above is presented to wet the TS2068 desktop publisher's appetite. In upcoming issues of TSDPJ I hope to dig deeper into this fascinating and flexible desktop publishing package.

Finally, Typeliner is used to print the created page in either Near Letter Quality mode or Draft mode to your printer.

Headliner is a graphic design program which can be used to create headlines, titles and logos. It comes with six different fonts and can be used to draw circles, boxes or arcs which can be "filled" with default or user defined patterns. Although Headliner is not as comprehensive as other "draw" programs, it does come in handy for quick headlines.

Word-Master prices range from \$18 to \$67 depending on which options you choose. The base package, Word-Master (which you MUST have in order to use any of the other packages) costs \$18, Headliner is \$14, Typeliner is \$24 and the Font Packs are \$10 each.

The entire package has a special price of \$67 plus \$3 shipping.

This article was just meant to give you a quick overview of the Word-Master desktop publishing system and it's extension programs. There are several additional features included in each package which were not mentioned here but will be the subject of future articles in TSDPJ. For more information on Word-Master write to Jack Dohany and he will send you information on how you can receive a Word-Master trial offer. From what I gather, Jack can customize Word-Master to any Spectrum emulated system, disk system, printer I/F and printer.

## Word-Master

Let's first take a look at the whole package. Word-Master is a word processing package not unlike Tasword II or MScript. In fact it appears more like MScript because it displays on screen hard carriage returns and command sequences. Word-Master works in a 64 column format and supports Delete/Undelete, Block functions, Search and Replace, Pitch, Justification, Control Characters, Page Numbers and more. In itself, it is an excellent word processing program for creating documents.

So, what does this have to do with desktop publishing? Word-Master is just the "Text Processing" part of the package. Where the entire package is controlled by the "File Handling Menu" which is considered the "Main Menu". This Main Menu allows you to handle all of the file handling functions including Save/Load file, set default Drive 0, 1, 2... where Drive 0 is cassette, Drive 1, 2 etc. are your disk drives or micro drives, Catalog of selected drive, Erase file from disk, List files in memory, Delete file from memory, load graphics file into memory and Link files.

The best way to understand how everything comes together is this: Think of all your computer memory as a RAM Disk, with Word-Master residing within some of that memory, and

controlling what is left. This left over memory space in RAM can be used to store text, graphics, page patterns, fonts, etc. You can load in as many of these types of files as your memory will allow. All this is done through the Main Menu.

So you still don't see how this relates with desktop publishing?

Well, along with being able to load in text files etc., you can also load into memory two programs, Typeliner and Headliner. Typeliner is the "Official" desktop publishing program, and Headliner is the graphic design program.

Typeliner is a tool which is used to format your text on the screen. It is extremely flexible and allows you to create columns of almost any width or length, as well as breaking up the text into multiple pieces and placing them anywhere on the page. It has functions to place up to twelve graphic (or SCREEN) files anywhere on the page and resize them.

Typeliner also features built-in line and box creation on page.

## Where to Write

Pixel Print Professional  
Lemke Software Design  
2114 White Oak  
Wichita, KS 67207

The Print Factory  
Byte Power Magazine  
1748 Meadowview Ave  
Pickering, ONT L1V 3G8  
Canada

Word-Master  
Jack Dohany  
435 Woodward Way  
Athens, GA 30606

(after June 1990 use...)

390 Rutherford  
Redwood City, CA 94061



## TSDPJ REVIEWS BYTE POWER MAGAZINE'S THE PRINT FACTORY FIRST EDITION

AS PROMISED, I AM GOING TO REVIEW EACH OF THE PROGRAMS AVAILABLE WITHIN **The Print Factory** FAMILY OF PROGRAMS FOR THE TS2068. THIS ISSUE I PLAN TO COVER THE DTP PROGRAM **First Edition**.

WHEN YOU RECEIVE **The Print Factory** IN THE MAIL, THE FIRST THING THAT CATCHES YOUR EYE IS THE DOCUMENTATION THAT COMES WITH THE TWO PROGRAM CASSETTES. THE FRONT PAGE IS A BEAUTIFUL PICTURE OF TWO BIRDS SITTING ON THE BRANCH OF A TREE, WITH THE TITLE **The Print Factory** WRITTEN LENGTH WISE ALONG THE RIGHT HAND SIDE. NO DOUBT THIS IS IMPRESSIVE, BUT WHAT IS MORE IMPRESSIVE IS THAT THIS PAGE CAN BE COMPLETELY CONSTRUCTED WITH A **PRINT FACTORY** PROGRAM SUCH AS **FIRST EDITION**.

**FIRST EDITION**, LIKE ALL OF THE **PRINT FACTORY** PROGRAMS USES THE "POINT AND CLICK" METHOD OF PULL DOWN/POP UP MENUES FOR SELECTION FEATURES, OPTIONS OR OPERATIONS. FOR THOSE OF YOU WHO HAVE NOT WORKED WITH THIS METHOD, IT IS WIDELY USED BY APPLE'S MACINTOSH COMPUTERS. THE WAY IT WORKS IS BY USING A JOYSTICK (TS2068 LEFT OR KEMPSTON) TO MOVE AN ARROW AROUND THE SCREEN. AT THE TOP OF THE SCREEN ARE SEVERAL BOXES WITH PICTURES OR WORDS WITHIN THEM THAT INDICATE OPERATIONS. USING THE JOYSTICK, YOU PLACE THE ARROW ON OR IN ONE OF THE BOXES AND PRESS THE FIRE BUTTON. THIS SELECTS THAT OPTION. IT IS THAT EASY!

**FIRST EDITION** IS A PAGE MAKER PROGRAM WITH WHICH YOU CAN CREATE POSTERS, NEWSLETTERS, COVER PAGES AND MORE. THE PROGRAM ALLOWS YOU TO MIX TEXT AND GRAPHIC DESIGNS ON A SINGLE PAGE. A NORMAL PAGE CONSISTS OF 72 COLUMNS BY 85 LINES. THIS REVIEW WAS CREATED USING **FIRST EDITION**. IN THE ATEXT MODE, THREE STANDARD FONTS ARE AVAILABLE, AND YOU HAVE THE OPTION OF LOADING OTHER FONTS. ONE INTERESTING POINT ABOUT **FIRST EDITION** FONTS IS WHEN A NEW FONT IS LOADED, IT REPLACES A PREVIOUS FONT AND CHANGES ALL OF THE CHARACTERS ON YOUR PAGE FROM THE OLD FONT INTO THE NEW FONT.

TS2068/SPECTRUM SCREEN\$ FILES ARE NOT SUPPORTED BY **FIRST EDITION**, INSTEAD **Graphic Designs** ARE USED. **GRAPHIC DESIGNS** TAKE UP MUCH LESS MEMORY SPACE THAN SCREEN\$S AND THEY CAN BE CREATED USING **The Creator**, ANOTHER **PRINT FACTORY** PROGRAM. NOT TO WORRY, EVENTHOUGH **FIRST EDITION** DOES NOT ALLOW SCREENS, **The Press** WILL.

**GRAPHIC DESIGNS** CONTAIN SOMETHING CALLED **Super Sets**. THESE ARE SUPER SIZED CHARACTERS WITH EXCELLENT DEFINITION. **SUPER SETS** RANGE FROM 8 TO 48 POINTS, AND 13 ADDITIONAL SETS COME WITH **THE PRINT FACTORY**. ONCE SELECTED, **SUPER SET** CHARACTERS ARE PLACED ON YOUR PAGE BY USING THE KEYBOARD AND TYPING THE LETTERS.

TEXT, **SUPER SETS** AND **GRAPHIC DESIGNS** CAN BE PLACED ANYWHERE ON YOUR PAGE BY USING THE ARROW KEYS FOR TEXT AND "POINT AND CLICK" FOR THE REST. OTHER FEATURES INCLUDE **HOME** AND **END** WHICH TAKE YOU TO THE UPPER LEFT CORNER AND LOWER RIGHT CORNER OF THE PAGE (RESPECTIVELY) IN AN INSTANT. **PRINT** ALLOWS YOU TO CUSTOMIZE THE PRINT CONTROL CODES FOR YOUR PARTICULAR TYPE OF PRINTER AS WELL AS SET DOT DENSITY AND PRINTER I/F TYPE. **FILE** IS FOR SAVING PAGES, LOADING PAGES, GRAPHICS AND FONTS. YOU CAN CLEAR THE PAGE, SET WIDTH AND LENGTH, AND **BREAK** TO BASIC TO MODIFY SAVES AND LOADS FROM CASSETTE TO DISK.

THREE PROBLEMS I SEE WITH **FIRST EDITION** ARE NO ABILITY TO CENTER TEXT OR **SUPER SETS**, WHICH WOULD BE EASIER WITH A METHOD TO SHOW WHERE WIDTHWISE THE CURSOR IS LOCATED ACROSS THE PAGE, AND A VIEW COMMAND SIMILAR TO THE ONE IN THE NEW **PIXEL PRINT**. EVERYTHING IS DONE USING A 32 COLUMN WINDOW. KNOWING WHERE WITHIN THE ENTIRE PAGE THIS WINDOW IS LOOKING AT AT ANY GIVEN TIME IS DIFFICULT TO KNOW, EXCEPT IN THE CASE OF A **HOME** OR **END** COMMAND. LAST IS THE LACK OF CUT, PASTE OR COPY COMMANDS.

THE BEST FEATURES ARE OF COURSE THE **SUPER SETS**, THE FULL PAGE WORK AREA, THE POP UP MENUS AND THE **FRAME** FEATURE. **FRAME** CREATES A BORDER FRAME BY SELECTING IT, POINT AND CLICK THE UPPER LEFT CORNER THEN THE LOWER RIGHT CORNER, AND THE PROGRAM CREATES THE WHOLE FRAME FOR YOU.

Byte Power Magazine  
1748 MEADOWVIEW AVE  
PICKERING, ONT  
L1V 3G8  
CANADA

### SUGGESTED FIRST EDITION USES:

REPORT COVERS  
POSTERS  
WEDDING SERVICE PROGRAMS  
NET WORTH/FINANCIAL STATEMENT  
NEWSLETTERS  
INSTRUCTION BOOKLETS  
DIRECTIONS TO EVENTS  
PRE-VACATION PLANNERS  
EMERGENCY PHONE NUMBER LIST  
"CONCENTRATION" GAME BOARDS  
CALENDARS  
DINGO CARDS  
CERTIFICATES  
FORMS

LET'S HAND IT TO **Byte Power** FOR THIS EXCELLENT DTP PROGRAM FOR BOTH THE TS2068 AND SINCLAIR SPECTRUM. MJF.

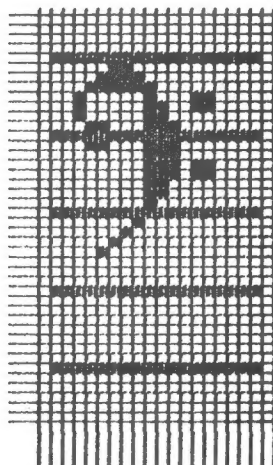
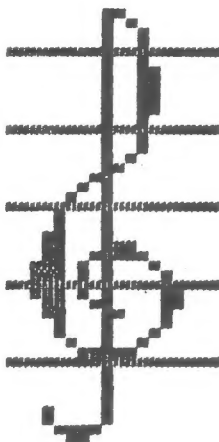
# LET ICONS BE ICONS

by BASIL

I've been experimenting with a TS2068 program to write music (to write it down, not to compose it--I don't intend to surrender to the computer all of the fun of creativity), and I found the need to construct a lot of user-defined graphics (or "icons"). Some of you may remember that SyncWare News (Vol. 2, Number 3, Jan/Feb 1985) ran an article by me on the subject, called Character Builder. The program described below has been modified to meet my new needs.

The new program incorporates the following features:

1. While it still lets me plot the icon in large scale, it also provides an unenlarged display, so I can see what the figure actually will look like in "real life".
2. The new program has the capacity for a larger figure than the old one did.
3. It provides (optionally) a music staff to show the icon in its natural habitat, and
4. It provides (again, optionally) a grid to help me transfer the icon to a working program.



Two examples are shown here: a treble clef without the plotting grid, and a bass clef with the grid. You will see that each is printed in normal size and enlarged size, just as the program displays them.

When you LOAD the program, you're presented with a set of instructions (which I amplify below) and a flashing square, 4x4 pixels in size. If you want the staff to appear, press "s"; a second press of "s" erases the staff. You can move the square by pressing (unshifted) 5-8, just as the arrows on the keyboard show.

Think of the black square as marking the position where a gnu stands (as you will see, he's a typical gnu and tiler, too). If you want him to deposit a black tile where the flash appears, press "1". If you want him to pick up a tile already at that spot, press that same "1". At any time that you want to examine the life-sized (smaller) image, press "i". It takes a little time, but you can watch the image take form, pixel by pixel. When the image is complete, the program returns you to the old condition (or should I say the gnu condition?).

When you're satisfied, a press of "z" will generate the plotting grid, and STOP, so that you can COPY it all out on your 2040 printer. If you don't want the grid, STOP the program by simultaneously pressing CAPS SHIFT and BREAK.

To SAVE the program, GO TO 9000. A VERIFY routine is built in.

# ICONS - 2

```

100 PRINT AT 15,0;"5-8 move spot"
110 PRINT "1 prints (or unpri
nts) spot"
120 PRINT "s prints (or unpri
nts) staff"
130 PRINT "i produces small i
mage"
140 PRINT "z produces grid, a
nd STOPS for copying"
1000 LET x=2: LET y=5
1010 LET z$=""
1020 OVER 1
1030 FOR f=1 TO 2
1040 PRINT AT y,x;z$
1050 FOR g=1 TO 5: NEXT g
1060 NEXT f
1070 IF INKEY$="" THEN GO TO 102
0
1090 LET c=CODE INKEY$
1100 IF c=226 THEN STOP
1110 IF c=49 THEN PRINT AT y,x;z
$: FOR f=1 TO 50: NEXT f: GO TO
1020
1120 IF c=115 THEN GO SUB 2200
1130 IF c=105 THEN GO SUB 3000
1140 IF c=90 OR c=122 THEN GO TO
4000
1200 IF c>56 OR c<53 THEN GO TO
1020
1510 GO SUB (2000+50*(c-53)): GO
TO 1020
2000 IF z$="" THEN LET z$=" "
RETURN: REM left
2010 IF z$=" " THEN LET z$=" "
RETURN
2020 IF z$=" " THEN LET z$=" "
LET x=x-(x>0): RETURN
2030 IF z$=" " THEN LET z$=" "
LET x=x-(x>0): RETURN
2050 IF z$=" " THEN LET z$=" "
RETURN: REM down
2060 IF z$=" " THEN LET z$=" "
RETURN
2070 IF z$=" " THEN LET z$=" "
LET y=y+(y<20): RETURN
2080 IF z$=" " THEN LET z$=" "
LET y=y+(y<20): RETURN
2100 IF z$=" " THEN LET z$=" "
RETURN: REM up
2110 IF z$=" " THEN LET z$=" "
RETURN
2120 IF z$=" " THEN LET z$=" "
LET y=y-(y>1): RETURN
2130 IF z$=" " THEN LET z$=" "
LET y=y-(y>1): RETURN
2150 IF z$=" " THEN LET z$=" "
RETURN: REM right
2160 IF z$=" " THEN LET z$=" "
RETURN
2170 IF z$=" " THEN LET z$=" "
LET x=x+(x<30): RETURN
2180 IF z$=" " THEN LET z$=" "
LET x=x+(x<30): RETURN
2190 REM staff

```

```

2200 FOR v=2 TO 10
2210 FOR h=5 TO 24 STEP 4
2220 PRINT AT v,h;" "
2230 NEXT h
2240 NEXT v
2250 RETURN
3000 REM image
3001 OVER 0
3005 LET hp=200: LET vp=170
3010 PRINT AT 0,25;" "
3020 PRINT AT 1,25;" "
3030 PRINT AT 2,25;" "
3040 PRINT AT 3,25;" "
3050 PRINT AT 4,25;" "
3060 FOR a=0 TO 240 STEP 4
3070 FOR b=175 TO 90 STEP -4
3080 IF POINT(a,b) THEN PLOT hp
,vp
3090 LET vp=vp-1
3100 NEXT b
3110 LET hp=hp+1
3115 LET vp=170
3120 NEXT a
3999 RETURN
4000 REM COPY
4005 OVER 0
4010 FOR f=84 TO 165 STEP 4
4020 PLOT 0,f
4030 DRAW 190,0
4050 NEXT f
4100 FOR f=20 TO 190 STEP 4
4110 PLOT f,84
4120 DRAW 0,90
4150 NEXT f
4999 STOP
8999 STOP
9100 SAVE "plot" LINE 1: REM SAV
E
9110 BEEP .3,12: BEEP 1,12
9120 CLS: PRINT "re-play to VER
IFY"
9130 VERIFY "plot"
9140 BEEP .3,8: BEEP 1,8
9150 PRINT AT 10,10: FLASH 1;" V
ERIFY OK"

```

0>REM Medicare Income Tax  
by Herb Bowers, Sr.  
071189

1 REM Starting with your 1989 returns, all individuals eligible for Part A Medicare benefits will be subject to a tax "surcharge" if their tax liability exceeds \$150. The amount of the surcharge will be based on tax liability, with a maximum tax of \$800 for 1989.

2 REM If you are ELIGIBLE for Part A coverage, the surcharge will apply; you may not avoid the tax by waving Medicare benefits. Those eligible for Part A coverage include ALL individuals age 65 or older and other younger disabled persons.

3 REM The tax will not apply in the first year you become eligible unless you are eligible for more than 6 months of the year.

4 REM If both you and spouse are eligible for Part A the annual tax ceilings are doubled.

5 REM If only one spouse is eligible and a joint return is filed, the limit applies but the tax is based on 50% of the joint return liability regardless of which spouse earned the income.

#### 6 REM TAX CEILINGS

|      |       |
|------|-------|
| 1989 | \$800 |
| 1990 | 850   |
| 1991 | 900   |
| 1992 | 950   |
| 1993 | 1050  |

7 REM Filing separate returns will not reduce the liability. Unless spouse live apart for the entire year, the tax ceiling in 1989 for each spouse on a separate return is \$1600, rather than \$800 making the maximum possible tax \$3200. If only one spouse is eligible both are treated as eligible on separate returns; the \$800 ceiling applies.

8 REM This short 2K program will quickly and accurately calculate the MEDICARE TAX for you. TO USE: Simply enter your tax liability from your 1988 income tax return or enter the amount of your estimated 1989 tax liability.

9 REM The IRS will publish a table to be use for the calculation of the tax but in the meantime you can determine the tax for yourself.

```

10 DEF FN a(f)=tax/150*r(f)
100 DATA 22.5,800,37.5,850,39,
    900,40.5,950,42,1050
110 POKE 23658,8: POKE 23609,10
120 CLS: LET q=0: LET t=0
130 DIM r(5): DIM s(5)
140 DIM t(5)
150 FOR f=1 TO 5
160 READ r(f),s(f)
170 NEXT f
1000 PRINT "MEDICARE INCOME TAX"
```

```

1010 PRINT "WHAT'S YOUR FILING
STATUS? (1-5)"
1020 IF INKEY$="" OR INKEY$<"1"
OR INKEY$>"5" THEN GO TO 1020
1030 LET fs=VAL INKEY$: PRINT f
5
1040 IF fs<>2 AND fs<>3 THEN
GO TO 1160
1050 PRINT "DO BOTH YOU AND SPO
USE QUALIFY FOR MEDICARE, PART
A? (Y/N)"
1060 IF INKEY$="" OR INKEY$<"Y"
AND INKEY$>"N" THEN GO TO
1060
1070 LET q=INKEY$="Y"
1080 PRINT "YES" AND q;"NO" AND
NOT q
1090 IF fs=2 THEN GO TO 1160
1110 PRINT "DID YOU AND YOUR SP
OUSE LIVE TOGETHER AT ANY TIME
DURING YEAR?"
1120 IF INKEY$<>"Y" THEN GO TO
1120
1130 IF INKEY$="" OR INKEY$<"Y"
AND INKEY$>"N" THEN GO TO
1130
1140 LET t=INKEY$="Y"
1150 PRINT "YES" AND t;"NO" AND
NOT t
1160 PRINT "ENTER TAX LIABILITY
FROM YOUR LAST FEDERAL INCOME
TAX RETURN"
1170 INPUT tax: PRINT "$";tax
1180 INPUT "IS THE ABOVE CORRECT
?"
LINE q$
1190 IF q$(1)="N" THEN RUN
1200 FOR f=1 TO 5
1210 IF t OR q THEN LET s(f)=
s(f)+2
1220 NEXT f
1230 IF fs=2 THEN LET tax=tax/2
1240 FOR f=1 TO 5
1250 IF tax<150 THEN GO TO 1290
1260 LET t(f)=FN a(f)
1270 IF (fs=2 AND q) OR t THEN
LET t(f)=t(f)+2
1280 IF t(f)>s(f) THEN LET t(f)=
s(f)
1290 NEXT f
1300 CLS
1310 PRINT "TAB 5; MEDICARE INCO
ME TAX"
1320 PRINT "TAB 5; YEAR";TAB 21;
"TAX"
1330 FOR f=1 TO 5
1340 IF t(f)>s(f) THEN LET t(f)=
s(f)
1350 PRINT "TAB 5; f+1988;TAB 20
+(t(f)<1000)+(t(f)<100)+(t
(f)<10);INT t(f)
1360 NEXT f
1370 PRINT AT 21,3;"COPY 00 AN
OTHER QUIT"
1380 IF INKEY$="C" THEN PRINT AT
21,0;TAB 31
: COPY
: GO TO 1370
1390 IF INKEY$="D" THEN RUN
1400 IF INKEY$="" THEN GO TO
1370
1410 STOP
9999 CLEAR: SAVE "medicaretx" L
INE 100: SAVE "medicaretx" LINE
100: SAVE "medicaretx" LINE 100:
VERIFY "": VERIFY "": VERIFY "
```



# Rotronics Wafadrive Copy Command for EPSON Compatible Printers

By Mike Felerksi

Way back in the November 1988, January 1989 and February 1989 issues of the ISTUG Newsletter, I had written three articles on converting UU-File, UU-Calc and UU-3D over to work with the Rotronics Wafadrive system. In those articles I mentioned a COPY like routine called DRAW\* that would COPY the screen through the Wafadrive to an Epson compatible printer. The catch was that the code came with something called The Rotronics Toolkit Wafer.

Since the demise of Rotronics in the UK, and the permission of the United States distributor of the Rotronics Wafadrive, ISTUG will present the DRAW\* code.

Since the COPY command is not directly supported by the Wafadrive's Centronics or RS-232 interfaces, a short machine code routine is needed to produce high resolution screen dumps to an Epson compatible printer. Since the control codes used are the <ESC> A and <ESC> L, this routine may work on other printers as well, but it has been written specifically for the Epson.

The routine gives screen dumps in two different sizes. It locates itself in the printer buffer and uses the Wafadrive's machine code auto-run facility, self-initializing upon loading. Memory location 23296 contains the Scale or copy size which can be 1 for normal or 2 for double. Location 23297 determines the left hand margin.

The program listed is for the Centronics port (it is most popular) and the stream DOES NOT have to be opened first. Break can be used to stop printing, but this may leave the printer in graphics mode so Damco, the former US distributor recommends holding the A key down until the printer stops.

Here is the BASIC routine to load the code into memory and SAVE\* it to wafer (when RUNNING the BASIC loader program, remember to have a wafer in the default drive that can be saved to.)

```
10 LET a=23296:FOR t=1 TO 15:LE
T s=0:FOR n= 1 TO 16:READ b:POKE
E a,b:LET s=s+b:LET a=a+1:NEXT
n:READ b:IF b<>s THEN PRINT "Er
ror in line ";90+10*t:STOP
```

```
20 NEXT t:SAVE* "draw dx-85",23
296,256,23298:STOP
```

```
100 DATA 2,6,33,183,92,1,60,91,
113,35,112,219,12,255,195,226,1
605
```

```
110 DATA 1,197,197,22,8,120,215
,176,34,71,4,126,7,16,253,203,1
650
```

```
120 DATA 19,193,4,197,21,32,238
,193,193,201,213,95,205,121,26,
209,2160
```

```
130 DATA 201,58,0,91,61,200,62,
3,50,0,91,201,254,252,194,26,17
44
```

```
140 DATA 1,33,71,91,195,9,1,205
,65,10,205,219,1,1,0,0,1107
```

```
150 DATA 62,27,205,42,91,62,65,
205,42,91,62,8,205,42,91,62,136
2
```

```
160 DATA 13,205,42,91,205,62,12
,40,21,246,32,254,97,32,15,62,1
429
```

```
170 DATA 27,205,42,91,62,65,205
,42,91,62,12,195,42,91,58,1,129
1
```

```
180 DATA 91,95,28,29,40,7,62,32
,205,42,91,24,246,62,27,205,128
6
```

```
190 DATA 42,91,62,76,205,42,91,
175,205,42,91,205,49,91,58,0,15
25
```

```
200 DATA 91,205,42,91,205,17,91
,205,49,91,123,40,24,31,31,31,1
367
```

```
210 DATA 31,22,4,203,15,203,27,
203,43,21,32,247,123,205,42,91,
1512
```

```
220 DATA 123,205,42,91,123,205,
42,91,12,32,217,62,10,205,42,91
,1593
```

```
230 DATA 62,13,205,42,91,205,49
,91,62,8,40,2,203,63,128,254,15
18
```

```
240 DATA 192,200,71,195,100,91,
0,0,0,0,0,0,0,0,0,0,849
```

-----  
If you wish to use the DRAW\* command with the RS-232 interface on the Wafadrive, POKE 23341,68. The channel does not have to be opened, but the baud rate may have to be formatted if not set to 1200.

Credit for this article must go to Damco Inc. USA and Rotronics Ltd. UK for the code and Wafadrive information.

## Turning the TOKENS Off

### Sending Single Bytes

By Mike Felerksi

The above DRAW\* routine uses machine code to send out control characters to the printer, but what if you want to send out your own codes? In order to do this you must first disable the tokenization. Characters that are tokenized are expanded when printed. For instance, an LPRINT CHR\$ 217 would send INK to the printer. Here is one method to send a character to the Wafadrive's Centronics I/F:

```
10 DATA 30,0,207,31,201
20 LET A=USR "A":FOR C=A TO A+4
:READ N:POKE C,N:NEXT C
```

Run this program. It will then locate in the UDG area. To send a byte to the printer, use:

```
POKE A+1,N:RANDOMIZE USR A
where N is the byte to be sent.
```



# S.M.U.G. Presents

The 1990 SINCLAIR COMPUTER Exposition

## MILWAUKEE

## WISCONSIN

June 2 & 3 / Banquet Friday Night June 1  
**SEMINARS, DOOR PRIZES, SWAP SHOP,  
SOFTWARE, PERIPHERALS, HARDWARE,  
AND LOTS OF OTHER STUFF**

Location

WAUKESHA HOLIDAY INN (414) 786-0460

Hwy 18 & I94 Waukesha, WI 53186

There will be a **SNUG** meeting Saturday Night June 2, 1990

**Ticket Information:**

|           | <u>in advance</u>             | <u>at the door</u> |                     |
|-----------|-------------------------------|--------------------|---------------------|
| One day   | : \$ 4.00                     | \$ 5.00            |                     |
| Both days | : \$ 7.00                     | \$ 9.00            |                     |
| Banquet   | : \$16.00                     | \$16.00            | Limited seating     |
| Table     | : \$25.00 (incl. 2 day badge) | \$25.00            | Limited table space |

Tables are 6 feet by 30 inches

For **MORE INFORMATION** contact

Bill Heberlein

Neal Schultz

5052 N. 91st Street

or

call 7 - 10pm

Milwaukee, WI 53225

(414) 353-4522

for **RESERVATIONS** mail to:

Expo Reservations

P.O. Box 101

Butler, WI 53007



Detach and Mail

Name \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please reserve \_\_\_\_\_ one day badge @ \$ 4.00 each = \$ \_\_\_\_\_

Please reserve \_\_\_\_\_ two day badges @ \$ 7.00 each = \$ \_\_\_\_\_

Please reserve \_\_\_\_\_ Banquet tickets @ \$16.00 each = \$ \_\_\_\_\_

Please reserve \_\_\_\_\_ 6' x 30" tables @ \$25.00 each = \$ \_\_\_\_\_

I have included a check/money order for total = \$ \_\_\_\_\_

I. S. T. U. G.  
513 EAST MAIN STREET  
PERU, IN 46970



FIRST CLASS MAIL



Address correction requested:

Don Lambert  
3310 Clover Dr. S.W.  
Cedar Rapids, Iowa  
52404

ISTUG is a not for profit, educational organization dedicated to helping users of Timex, Sinclair and Cambridge computers. We offer a hardcopy and software library for our membership along with technical assistance and monthly meetings (usually the last Saturday of the month at 1:30 P.M.). Full membership is available at \$12 per year and newsletter only subscriptions at \$9 per year. Send all inquiries, along with SASE, to ISTUG, 513 E. Main St., Peru, IN, 46970.

